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HOW DO COGNITIVE BIASES AFFECT INDIVIDUAL INVESTORS' DECISION-MAKING? A DHAKA STOCK EXCHANGE CASE

Abstract

In an attempt to examine the relevance of behavioral finance in the capital market of Bangladesh, this study intends to investigate which cognitive biases and behavioral errors lead to the psychological biases ultimately affecting the rationality of individual investors' choice of investment pattern on the Dhaka Stock Exchange. A structured survey questionnaire is used, identifying 32 factors grouped into seven separate quantitative variables – accounting, technical, diversification, herding, heuristics, market, and personality – to evaluate against one dependent variable: the demand for common stock. The database has been developed for a one-year tenure from January 2024 to January 2025. The paper applies multiple Regression Analysis and Chi-Square tests on 424 active investor responses after confirming the reliability and validity of the variables. The findings reveal that, except for diversification, five independent variables – market, accounting, technical, herding, and heuristics – appear significant at the 1% significance level, while personality significantly affects the rationality of investment behavior at the 5% significance level. This confirms the existence of psychological and cognitive biases that disrupt the individual investment patterns of investors at the Dhaka Stock Exchange. Consequently, this study recommends that more awareness and financial literacy should be introduced by formal training and counselling sessions in exchange for the better restoration of confidence and literacy of investors in their respective belongingness to the financial market.

Keywords investment psychology, rationality, behavioral finance, investment behavior, cognitive biases, Dhaka Stock Exchange

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INTRODUCTION

The complexity of investment behavior comes from mismatches in the knowledge level of investors and their fund management capacities. In the market, not all investors are equally informed, and even those with similar levels of knowledge may differ in their ability to manage funds and channel savings into investment opportunities (Ansari et al., 2022). Although the basic objective is still the same for all investors, which is maximizing return with minimum risk, the optimal allocation and utilization of investment funds call for some realistic approaches to the practical demeanor of the real-world scenario. The acknowledgement and inclusion of the existence of behavioral biases in the decision-making process is one such promising establishment in the knowledge base. With the number of traders in Bangladesh's financial market increasing, it is no longer sufficient to rely just on speculation to explain investor behavior (Hossain & Hamid, 2024). Rather, it requires a scientific approach to trace all the behavioral issues and thinking processes that an investor has to go through before making a final investment decision. The theoretical approach to incorporate and formalize such behavioral factors from an individual's point of view

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is significant to address the problem of irrational investment decisions and resulting financial losses in the capital market (Ricciardi & Simon, 2000).

Behavioral finance combines psychology with finance to point out the cognitive and behavioral errors each investor may face in making any rational decision in the financial market. Bangladesh, being an extremely emerging market for financial inclusion and capitalism, has been juggling in the basic periphery of behavioral finance with naivety of the investors and lack of financial awareness, irrespective of the investor's background (Oprean & Tanasescu, 2014). Moreover, being a culturally different region from the western part of the world, it is highly researchable which behavioral biases affect investors of this region and how significantly they should take proper measures for ensuring the efficiency of the Dhaka Stock Exchange (Kumari & Sar, 2017).

1. LITERATURE REVIEW AND HYPOTHESES

Since its theoretical formulation, the relevance of behavioral finance has been targeted by researchers in a massive manner from all corners of the world. Eventually, the ideas of behavioral finance have been studied empirically and widely to incorporate the factors and variables leading to irrationality of investors in different markets and nations. The cognitive factors leading to psychological biases are sufficient to explain the existence of the mapping paradigm of the behavioral finance aspect. Behavioral finance can be regarded as one of the perfect approaches to explain why investors choose investments. It includes the claim that odd habits of investors may influence their investment choices (Grinblatt & Han, 2009; Trinugroho & Sembel, 2011; Mushinada & Veluri, 2018).

Starting the research journey in behavioral economics in the 1960s, Daniel Kahneman introduced the gambler's fallacy in the financial market as the first psychological bias and therefore the foundation wedge of behavioral finance into the literature. It deals with an investor's decision-making process, inaugurating the contrarian thinking of investors who inappropriately predict price reversals in stock price trends (Kahneman & Tversky, 1973). The very next progress in the concept was also done by Kahneman and Tversky (1973), who defined representative bias in their study. According to this study, most investors tend to evaluate a decision under uncertainty based on the salient features of a company that represent the company best, such as competent management, quality products, fame, etc. (Kahneman & Tversky, 1973).

Following previous research, these two pioneers of behavioral finance again introduced another major concept named Prospect theory in 1979 that recognized investor over-sensitive perception or reaction towards financial losses over gains. The research field was further analyzed in terms of investors' demographic and socio-economic characteristics and how they can be relevant to structuring behavioral responses. According to the study, investors' exclusive investment in domestic assets manifests as "home bias," due to precautions taken against inflation and an excess of trust (Karlsson & Norden, 2007). Further psychological biases, like overconfidence bias, have also been identified and acknowledged in the process, where investors who depend on fundamental research have higher goals and take risks excessively, according to a study based in the Netherlands (Huang, 2018).

The upsurging research in behavioral finance has also occurred in East Africa. A thoughtful study on the grounds of behavioral finance on the Nairobi Stock Exchange confirmed the existence of behavioral finance disclosing that market variables such as a firm's reputation, performance, and status, accounting variables such as past performance and investment returns, diversification variables such as loss minimization and risk management, and finally the herding variable as opinions of third parties influenced the investment decision making of investors (Ambrose & Vincent, 2014). The predictability of the Pakistan stock exchange has also been enriched by the findings that investors are positively influenced by the herding, market, and heuristic variables, and negatively by the prospect variable (Anum & Ameer, 2017).

A subtle but steady growth in behavioral finance research tends to enrich the literature from different country perspectives, the development of the concept being ensured not only globally but also in Asian market contexts. One such research found the impact of psychological factors on the investment decision-making of the Indonesian investors. The behavioral or psychological factors that were investigated are anchoring, representativeness bias, herding behavior, loss aversion, overconfidence, and optimism biases (Kartini & Nahda, 2021). This research conducted a questionnaire survey-based study in the context of the Pakistan Stock Exchange and came up with three biases: disposition effect, herding, and overconfidence bias, having a significant positive impact on investors' investment decision-making in Pakistan (Ullah, 2020). Research conducted another questionnaire survey to collect data from 243 investors in the India Stock Exchange, where overconfidence bias, anchoring bias, disposition effect, and herding behavior were the behavioral anomalies being examined and had a positive impact through the inferential and descriptive statistics (Madaan & Singh, 2019).

With growing interest and enthusiasm in finding more paradigms of human psychology, studies have been shaped to include more realistic and representational biases to enrich the literature. Research on the Colombo Stock Exchange observed that the impact of behavioral factors, namely overconfidence bias, herding bias, prospect bias, and availability bias, all have an influence on the investment decisions of individual investors (Kengatharan & Kengatharan, 2014). A study was conducted in the Islamabad Stock Market and found that various biases like overconfidence, self- attribution, and over-optimism are negatively related to the investment decision of the investors (Kafayat, 2014). Research examined the impact of overconfident bias on investors' decisions in the Tehran stock market. The result of the study was that there was a significant impact of overconfidence on the investors' decisions in that country (Pourjiban et al., 2014). Research examined the relationship between the investment decision and behavioral biases (overconfidence, conservatism, herding, regret) in the stock market of Malaysia. From his study, it was found that except for herding, the other three biases have a positive impact on the decision-making process of investors (Lim, 2012). Their study investigated the factors affecting the investors' investment decision-making and performance in the Ho Chi Minh stock exchange. For conducting the study, he examined the biases, namely overconfidence bias, availability bias, herding, market, prospecting, and anchoring bias. The result found that three factors (herding, prospect, and overconfidence) have an impact on the investment performance, and all the factors have an impact on the investment decision to a moderate level (Luong & Thu Ha, 2011). Examined the impact of overconfidence bias and illusion of control on investors' decision-making in the Islamabad Stock Exchange. The result of the study showed that these biases have a significant positive impact on investment decisions (Qadri & Shabbir, 2014). The findings of the study were the investor's decision-making of the Bhubaneshwar Stock Exchange, which is influenced by different types of psychological biases like overconfidence, anchoring, regret, and loss aversion (Tripathy, 2014). An investigation of the Pakistani stock market revealed the existence of almost all psychological biases, including heuristic, herding, market, and prospect variables, in the decision-making of investors (Rasool & Ullah, 2020). Research supports the existence of behavioral finance and the inappropriateness of traditional finance in explaining the market anomalies in the Chinese security market (Zhang & Zheng, 2015). Research significantly supported all the stated factors as the driving factors of investors in how they constructed their portfolios (Seetharaman et al., 2017). Market information (firm's reputation, talk show, media news, status, involvement in solving social problems, accounting information (financial statements, earnings per share, past performance) and money market conditions (advice of friends, family and brokers and affordable price, ease of getting fund) strongly influenced the decision making of investors (Akhter & Ahmed, 2013).

Outside of these international settings, recent research in the Bangladesh Stock Market has been conducted to uncover the key aspects impacting investors' perspectives in such a developing market. Based on the findings, investors in Bangladesh place the highest weight on financial data, while less weight is placed on a company's reputation or other defining characteristics (Chowdhury &

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Jannatunnesa, 2017). When looking at investors in Khulna City, Bangladesh, one study found that the prospect of financial stability via participation in the stock market had the greatest impact on their choices. Besides market and hedging factors, financial measures from financial reports are also influential on investment firms (Khan, 2017).

The prolongation of the studies in behavioral finance did not escape, including the emerging global concerns, with COVID-19 being the most recent one. Conventional financial models might not account for the effects of recent events, such as COVID-19 fear, which could be the reason for these biases that result in inefficiencies. Using a Coronavirus Fear Index (CVFI), the output revealed that fear and anxiety have a detrimental effect on the index of the S&P500, the representative for the US stock market (Vasileiou, 2021). Managers can improve and develop their practices for ideal impact, one of the aspects of transformational leadership, with the aid of future vision capabilities, overcoming self-interest, and acting in a way that encourages people to copy them (Muttar et al., 2021).

In the new era of digitalization of financial archetypes, behavioral finance is being studied with equal enthusiasm for possible contributions. Two second-order notions, namely biases induced by cognition and biases induced by emotions, have been modeled based on the sources of errors in investment decision-making (Ritika & Kishor, 2022). Considering the personal traits of financial professionals in the Indian financial sector, the output revealed that financial professionals are extraverted and conscientious to a high degree, agreeable and open to a moderate degree, and neurotic to a low degree (Baker et al., 2023). Machine learning technologies have been introduced to help create models that not only help to uncover behavioral bias among traders but also help to provide timely feedback to traders (Singh et al., 2022).

Given the undeniable existence of cognitive errors and the continuous emergence of new psychological biases, this research paper posits the legitimate ground for the investigation of similar errors that Bangladeshi investors may encounter during decision-making, which would surely secure more rationality in their choices of investment.

Therefore, the statistical test of the following hypotheses can build a strong foundation for the mapping road of behavioral finance inclusion into the individual decision-making process:

H_1: *A firm's reputation affects the demand for common stock in Bangladesh's financial market.*

H_2: *The desired accounting performance affects the demand for common stock in the DSE.*

H_3: *Trading patterns and fundamentals of individual trading affect the demand for common stock in the DSE.*

H_4: *Opinions and recommendations on stocks affect the demand for common stock in the DSE.*

H_5: *Heuristic instincts and beliefs of the investors affect their demand for common stock in the DSE.*

H_6: *Preferences for national and socially recognized stocks affect the demand for common stock in the DSE.*

H_7: *Individual personality traits affect the demand for common stock in the DSE.*

2. METHODOLOGY

This study used descriptive survey research as the basic design to mainly control the coverage of research for the investment decisions of individual investors of the Dhaka Stock Exchange (DSE). A total of 28,12,785 individual investors in the Dhaka Stock Exchange are the population for the study, from which the sample size appears as 424 individual active investors using a scientific sampling formula for a known population size. A questionnaire comprising 32 factors, each signifying behavioral errors of individual investors, was used to randomly survey the sample size against one dependent variable: demand for common stock for the time period January 2024 to January 2025, only in Dhaka city. The research factors representing particular variables have been measured by a 5-point Likert scale in the survey questionnaire

with anchors ranging from 1 as strongly disagree to 5 as strongly agree. Each variable has been selected based on current performance trends, market anomalies, identical market review of literature, and opinions from market practitioners. The description of the variables is explained in Table 1.

Table 1. Variable descriptions

SL. No.	Variable Name	Factor Name
1	Market Variable	Reputation of the firm
2		Renowned managers of a specific firm
3		Feelings for a firm's quality products & services
4	Accounting Variable	Sales Growth
5		Taking high risks
6		Earnings per share (EPS)
7		Return on Equity (ROE)
8		Net Asset Value (NAV)
9		Price/Earnings Ratio
10	Technical Variable	High recent returns
11		Trading volume
12		Value trends of the past performance of a firm's stock over the fundamental value
13		The stock price will reverse
14	Herding Variable	Acquisition of private information on a particular stock
15		Broker recommendation
16		Family, friends, or coworkers' opinions.
17		Opinions of the firm's majority stockholders
18		Cashing out the stock in the near future
19	Heuristic Variable	Trade multiple times every day
20		Put emphasis on news and media coverage before choosing a stock
21		Sell once a stock has gained a positive return
22		Hopeful on loss-making stocks
23		Consideration of the fundamental value calculation of each stock
24	Diversification Variable	Include more stocks that are discussed in social programs
25		The purpose is to hedge against inflation
26		Diversify the investment amount among multiple asset classes like Bonds, Savings Certificates, DPS, FDRs, Real Estate, etc.
27		Has a different set of faith for national products in any given crisis
28		Preference for local company stocks over MNCs
29	Personality Variable	Trade until the maximum return on a stock is realized
30		Optimism is everywhere in the market
31		Never take a wholesome decision based on a few good/bad news-
32		The good news is scary, too
33	Dependent Variable	Demand for Common Stock

All the responses have been converted to the algorithmic meaning value of the scales. The range was calculated according to the following equation: highest weight minus the lowest weight = (5 – 1 = 4) as per the Likert scale. The range is then divided by the level of each response, for example, neutral, to be signified by 3, so it will give the length of the cell as 4/3 = 1.33. Such lengths of factors give the relative value as well as the importance of the factors. Finally, the mean value of factor lengths has been taken as the value of each representing variable.

As the study was conducted based on a survey-based questionnaire, a huge number of individual active investors were communicated through brokerage firms with complete anonymity, so that no individual behavioral responses could be associated with specific personnel. Based on the objectives and variables of the study, a draft schedule for the interview has been prepared. The principal method employed was a face-to-face personal interview using the interview schedule for the study. A few corrections were made on the draft as per field experience and incorporating the suggestions made by the market practitioners. Then the final interview schedule has been prepared after necessary additions, deletions, corrections, and modifications based on pre-test results.

3. RESULTS

The measurement of an underlying construct is associated with Cronbach's alpha as an index of reliability for the variation accounted for. Moreover, the reliability test of the model variables also indicates the consistency of the measuring instruments on the grounds of stability (Jackson et al.,1941). A rule of thumb for interpreting alpha for dichotomous questions (i.e., questions with two possible answers) or Likert scale questions is: https://www.statisticshowto.com/wp-content/uploads/2014/12/CA2.png. In general, a score of more than 0.7 is usually sufficient. The values of the reliability coefficients for each variable (α) of the study are illustrated in Table 2.

The outcome reveals that the general flow of the reliability coefficient for all the model variables is 0.792, which is higher than 0.7, establishing it as a reliable measurement for the same. Even

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Table 2. Cronbach's alpha for the reliability test

Variable Name	No. of Factors	Reliability Coefficient (α)
Market	3	0.765
Accounting	6	0.767
Technical	4	0.766
Herding	5	0.757
Heuristic	5	0.768
Diversification	5	0.805
Personality	4	0.806
Demand of Common Stock	1	0.768
General Rate	33	0.792

the particular value of (α) for each variable ranges from 0.768 to 0.806, which indicates that the questionnaire is reliable for further analysis.

As for the validity of the collected database, the data collection process was conducted using revised interview schedules from several leading research teams of market practitioners in DSE to ensure all realistic factors were included, which would ultimately lead to the study's objective. Index of Item-Objective Congruence (IOC) verification has been ensured before the pre-test and after the field test to verify the validity of the questionnaire. According to Vallejo, factor analysis helps to establish the construct validity of what is to be measured. Table 3 displays the factor loadings of the variables.

Table 3. Validity test of the variables

Variable Name	Factor Loading	Extraction Score
Market	0.796	0.703
Accounting	0.722	0.804
Technical	0.713	0.716
Herding	0.771	0.706
Heuristic	0.727	0.752
Diversification	0.502	0.511
Personality	0.576	0.787
Demand for Common Stock	0.711	0.763

The outcome suggests the factor loading for each of the variables surpasses the margin value of validity, which is below 0.5. Hence, it authenticates that all variables and factors of the model are valid to approach the core objective of the study realistically.

For further analysis of the multicollinearity issue in the independent variables, the numerical value for VIF (in decimal form) has been calculated to see what percentage the variance (i.e., the standard error squared) is inflated for each coefficient. A rule of thumb for interpreting the variance inflation factor states that any VIF value not exceeding the value of 10 shows no sign of multicollinearity between the variables, as represented in Table 4.

Table 4. Multi-collinearity test for independent variables

Independent Variable	Tolerance	VIF
Market	0.769	1.300
Accounting	0.835	1.197
Technical	0.654	1.528
Herding	0.731	1.369
Heuristic	0.711	1.407
Diversification	0.950	1.053
Personality	0.929	1.076

Table 4 shows the collinearity statistics (Tolerance and VIF) for all the independent variables used in the study, none of which exceeds 10, the value of the possible multi-collinearity effect. Thus, the chance of multicollinearity problems between the independent variables can be ignored as most of the variance-inflating factors (VIF) for all of the independent variables are much less than 10.

After confirming the reliability, validity, and multicollinearity aspects of the database, statistical approaches were refined to establish more scientific inferences among the variables. A chi-square statistic is one such way to show a relationship between two categorical variables. In statistics, there are two types of variables: numerical (countable) variables and non-numerical (categorical) variables. The test uses Pearson's chi-squared test and variants thereof to be distributed under the null hypothesis specifically.

Table 5. Chi-square test summary

Explanatory Variable	Chi-Square Test
Market	$\chi^2 = 206,112,\ df = 12, p = 0.000***$
Accounting	$\chi^2 = 363,269,\ df = 16, p = 0.000***$
Technical	$\chi^2 = 368,343,\ df = 24, p = 0.000***$
Herding	$\chi^2 = 292,083,\ df = 12, p = 0.000***$
Heuristic	$\chi^2 = 200,23,\ df = 16, p = 0.000***$
Diversification	$\chi^2 = 24,878,\ df = 16, p = 0.072*$
Personality	$\chi^2 = 16,995,\ df = 16, p = 0.386(NS)$

Note: χ^2 Chi-square, n = 424: *** p < 0.0001; ** p < 0.01; * p < 0.05; and NS not significant; df degrees of freedom.

From Table 5, there is no association between the demand for common stock (dependent variable) and the Personality Variable (p = 0.386) in considering the investment decision in stock. On the contrary, a significant relationship exists between Diversification (p = 0.072) at a 90% confidence interval, with the dependent variable – demand for common stock. There is a highly significant (p = 0.000) relationship between Market, Accounting, Technical, Herding, and Heuristic variables, with the dependent variable – demand for common stock at a 1% significance level.

To precisely investigate the relationship between internal and external factors that affect the role of behavioral finance in investors' investment decisions, Multiple Regressions are used to test the hypothesis of the study. Multiple Regression analysis (MRA) refers to a linear statistical technique to find the best relationship between dependent variables and several other independent variables through the least squares method (Mekanik et al., 2013). A Multiple Regression Model is one of the most prevalent methodologies in business research (Hopkins & Ferguson, 2014). The model used in this research is shown below.

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_k x_k, \qquad (1)$$

where Y – the value of variable Y (STDM) is measured for a known particular X value, X – independent variables, α – the point where the regression line intersects the Y-axis, β – the slope of the regression line, determined by the amount of change in Y for each amount of change in X.

This study has seven quantitative independent variables: Market is X_1, Accounting is X_2, Technical is X_3, Herding is X_4, Heuristic is X_5, Diversification is X_6, and Personality is X_7.

From Table 6, there are seven psychological variables: Market, Accounting, Technical, Herding, Heuristic, Diversification, and Personality variables, which have been considered before investing in the stock market. To test hypothesis 1, it can be seen that the market variable supports the hypothesis with a significance level of 99%, the above illustrates that hypotheses 2, 3, 4, 5, and 7 are also supported the alternative hypothesis with a significance level of 99% and 95% respectively, though hypothesis 6 does not support the study that preferences for national and socially recognized stocks affect the demand on common stock in the financial market of Bangladesh. From the model, it can be known that $R^2 = 0,722$, suggesting that 72.2% of the variance in the extent of investor behavior can be explained by the model.

Table 6. Multiple regression

Variables	Coefficient	β	*t*-Value	P-value	R^2	Adjusted R^2	F-value	P-value
(Constant)	0.206	–	0.573	0.567 (*NS*)	0.722	0.521	31.81	0.000***
Market	0.302	0.232	5.942	0.000***				
Accounting	0.316	0.304	8.113	0.000***				
Technical	0.233	0.213	5.046	0.000***				
Herding	–0.272	–0.254	–6.337	0.000***				
Heuristic	0.22	0.242	5.957	0.000***				
Diversification	0.032	0.041	1.18	0.239 (*NS*)				
Personality	0.061	0.07	1.982	0.048 *				

Note: *** p < 0.0001; ** p < 0.01; * p < 0.05; *NS* not significant.

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Table 7. Summary of hypothesis testing

Hypothesis	Result
Hypothesis 1: Consideration of market variables to identify the respective psychological biases.	*H1* is supported
Hypothesis 2: Consideration of accounting variables to identify the respective psychological biases.	*H2* is supported
Hypothesis 3: Consideration of technical variables to identify the respective psychological biases.	*H3* is supported
Hypothesis 4: Consideration of herding variables to identify the respective psychological biases.	*H4* is supported
Hypothesis 5: Consideration of heuristic variables to identify the respective psychological biases.	*H5* is supported
Hypothesis 6: Consideration of diversification variables to identify the respective psychological biases.	*H6* is not supported
Hypothesis 7: Consideration of personality variables to identify the respective psychological biases.	*H7* is supported

4. DISCUSSION

Starting from the psychological biases that may arise due to the market variable, which is one of the most prominent psychological barriers to investors of DSE. As per this study, all of the statistical tests come up with a significant existence of social and reputational bias coming from market variables in the decision-making of DSE investors. DSE investors also exhibit reputational bias and other market-related cognitive biases, where the reputation of popular professionals, as per news media, affects their consideration of stocks. The outcome goes with the findings of similar studies on the psychological biases of Pakistan's capital market (Begum and Siddiqui, 2024). Even the Tehran stock market reported a similar existence of market variables forming reputational bias and affecting investment decisions (Khoshsirat & Salari, 2011).

The factors taken under the accounting variable show the existence of the gambler's fallacy in DSE investors, which means DSE investors are involved in contrarian thinking. These findings of an emerging market go in line with the contrarian investment philosophy observed in most of the developed markets, like the American stock market (Hansen, 2015). It is equally observable in other Asian markets like the Indonesian capital market, where contrarian strategy and concurrent momentum rule over the decision-making process (Rafik & Marizka, 2017).

The irrationality found in the study is the implication of prospect theory derived from the technical variable in the Dhaka Stock Exchange (DSE). It explains stocks and psychological practices like excessive trading, buying stocks without seeing the fundamental value of stocks, and making decisions solely based on seeing the trend of stock performance or the past performances of companies. A quantile regression approach on a similar prospect theory framework is significant in the Indian stock market (Yadav & Dixit, 2025).

The Herding variable is also very prominent and significant in every model used in this study for the behavioral pattern of investors of DSE. Simply put, investors of the Dhaka Stock Exchange tend to follow others irrationally without thinking about the core valuation tactics and strategies of basic finance. A very significant study on the herding behavior in the global markets also confirmed its powerful existence in developed markets like the American stock market as well as Asian markets, while observing Latin American markets as free of such behavior (Chiang & Zheng, 2010).

The selection of factors under the Heuristic Variable discloses the existence of the Disposition Effect, loss aversion bias, utility function, representative bias, and availability bias in the investment behavior of individual investors of the Dhaka Stock Exchange. Starting with the very first bias taking place due to the disposition effect, the study introduced the tendency of DSE investors to hold on to loss-incurring stocks with the expectation that the price will reverse without any logical ground. A similar result has been observed in the Pakistan stock market, where heuristics directly influenced the individual investors (Shah et al., 2018), and heuristics have been reported as one of the main factors in creating fundamental and technical anomalies in capital markets (Lazuarni & Asri, 2019).

Next comes the diversification variable, which signifies that the psyche of DSE investors, as they tend to think equity investment is correspondingly safe as other mutual funds and bank deposits, is statistically non-significant for the decision-making of

DSE investors. This outcome contradicts a major study in emerging markets, which reveals investors tend to take advantage of the diversification options internationally available in Asian capital markets while benefiting from diversification effects (Liu et al., 2018). This paradox in the context of DSE can be solved by the non-availability of enough foreign investment windows and also the very limited scope for asset class diversification.

Next comes the personality traits of the investors that might or might not be affecting their rational way of decision-making. In this study, Multiple Regression Analysis has recognized the existence of personality bias in DSE investors, whereas the chi-square test has come up with non-significant outcomes. The factors taken into consideration for weighing personality variables encompass the traits of the individuals, like greed, fear, optimism, emotional overthinking, experience, age, and reaction towards good news. The similar personality traits (neuroticism and openness) and emotions (fear and anger) appeared significant for Turkish investors (Aren and Nayman, 2020). Even the behavioral responses and control of individual investors towards stock investment had been influenced by Big Five personality taxonomies (Lai, 2019).

CONCLUSIONS

The aim of this paper is to address and investigate the existence of psychological biases while taking investment decisions by the DSE individual investors based on the prevalent biases for the emerging markets. This study is the first of its sort to focus on the Bangladeshi capital market for the widest range of variables taken into consideration, which explain the cognitive biases each investor may face during their choice of investment opportunities. This paper adds its prolific contribution to the existing body of literature by compiling the core findings on a total of 32 factors from 424 individual investors, organizing them into seven quantitative categories. These variables have been shown to have a statistically significant impact on the choices made by investors in the Bangladeshi stock market. In the context of the DSE, this research module is also unique in its core compliance with the reliability and validity test criterion, making it a very broad approach to the subject matter. Therefore, the outcome made from the variables can be regarded as a reasonable representation of the truth, signifying the very existence of the cognitive errors in the decision-making of individual investors on the Dhaka Stock Exchange. The final result points out the insignificance of the diversification variable, resembling the true state of DSE with the absence of proper investment classes and the unavailability of any foreign listing to the exchange. All other variables – market, accounting, technical, heuristic, herding, and personality – with strong statistical significance mirror the vulnerable psychological aspects of DSE investors due to their lack of financial literacy and lower confidence in the exchange performance. However, the current research can further be improved while incorporating macro-environmental factors such as GDP, political instability, changes in market rules and provisions by the regulators, and financial awareness of investors in a parallel mode. More emphasis on this type of research, if conducted often, will provide light on hitherto uncharted territories and biases in Bangladeshi stock market investing.

AUTHOR CONTRIBUTIONS

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